

Chapter 6 Test Study Guide

Directions: Complete this study guide with your notes and textbook handy. Please look up and **study** anything you are unsure of. Show your work, and always put your answers in simplest form.

Lesson 6-1 Multiplying Fractions- Find each product. Reduce before you multiply where possible.

1) $\frac{3}{10} \times 45$	2) $\frac{4}{9}$ of $\frac{3}{10}$
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Lesson 6-2 Multiplying Mixed Numbers- For #4-6, find each product. Estimate mentally first to make sure your final answer is reasonable. Reduce before you multiply where possible.

3) What **MUST** you do to mixed numbers before you can multiply or divide them? Please explain in your own words why you must do this.

4) $3\frac{1}{5} \times 1\frac{7}{8}$	5) Find the following product using an area model. $2\frac{1}{2} \times 1\frac{1}{4}$ <div style="border: 1px solid black; width: 200px; height: 100px; margin: 10px auto;"></div>	6) $3\frac{1}{9} \times 3\frac{3}{8}$
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Lessons 6-3 and 6-4 Dividing Fractions and Mixed Numbers- For #8-10, find each quotient. Estimate mentally first to make sure that your final answer is reasonable. Reduce before you multiply where possible.

7) What are the three steps you must follow when dividing fractions? (**hint:** It's the cool way of saying "multiply by the reciprocal of the divisor")

8) $\frac{9}{16} \div \frac{3}{4}$	9) $10\frac{1}{2} \div 1\frac{3}{4}$	10) $3\frac{1}{6} \div 2$
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Lessons 6-5 Solving Fraction Equations by Multiplying- Solve for the variable in each equation. **Isolate the variable** by multiplying each side of the equation by the **reciprocal** of the fraction next to the variable.

11) $\frac{2}{3}x = 8$	12) $\frac{3}{5}n = 9$
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Lesson 6-7 The Customary System- Have your conversion chart handy. Then, follow the steps below to convert units.

Step 1- Identify whether you are going to multiply or divide:

- Larger Unit → Smaller Unit (Multiply!)
- Smaller Unit → Larger Unit (Divide!)

Step 2- Choose the appropriate conversion(s) from the chart

Step 3- Complete the operation to convert to the new units

13) 880 in. = _____ ft.	14) 2 ½ gal = _____ c
15) 12,000 lbs. = _____ t	16) You are making bows from 50 yards of ribbon. How many feet of ribbon do you have?

Application

Directions: Read each problem **twice** carefully. Underline important information. Decide whether you will multiply or divide before you begin to solve.

17) There are $1\frac{1}{3}$ times as many girls as there are boys at a party. If there are 18 boys, how many people are there at the party?

18) Several textbooks fill Ms. Pike's bookshelf. Each textbook is $1\frac{1}{4}$ inches wide. The shelf is $27\frac{1}{2}$ inches long. How many textbooks fit on the bookshelf?

19) Mr. Minera gave Mrs. Minera $\frac{3}{4}$ of his burrito. Mrs. Minera ate $\frac{1}{2}$ of it and shared the rest with Baby Juice. What fraction of the whole burrito did Mrs. Minera eat?

Lesson	Concept	Got It	Need to Review	What I will do to review
6-1	<u>Multiplying Fractions</u>			
6-2	<u>Multiplying Mixed Numbers</u>			
6-3	<u>Dividing Fractions</u>			
6-4	<u>Dividing Mixed Numbers</u>			
6-5	<u>Solving Equations</u>			
6-7	<u>Converting Customary Units</u>			

